# IP Camera User Manual

Product name: HD IP Camera

Document version: V1.1

Document is applicable to 720P HD IP Camera

# Statement

If the user manual cannot help you to solve the problem, please call our technology center about the solutions. We will update the content for the new functions without notice.

# Notice

## 1. Installation Environment

- ❖ Keep away from the places for high-temperature, heat source and direct sunlight;
- ❖ Keep away from water. When get wet, cut off the power immediately;
- ❖ Avoid to use in damp environment, the reference range for operation humidity is below 85%RH ,the reference range for operation temperature is -10 ~ +50℃.
- ❖ Please install horizontally or wall mounting, avoid to strenuous vibration and not put other equipment onto the item.

## 2. Transport and Handling

- ❖ The package is well-designed to ensure the security during the delivery, so please do not change the package at random;
- ❖ Do not move the IP cameras from overheated to super cooled condition frequently, otherwise it will frost and shorten the service life;
- ❖ Do not move the item when is power on, otherwise the main board might be damaged.

## Notice:

1. Please check the power supply before it is working.
2. Be careful not to bang the camera or subject it to strong impacts or shocks.
3. Do not directly touch the optical components for the image sensor, if necessary, please place a clean and moistened cloth with alcohol and wipe the dirt gently; When not in use, please place the dust cover on to the item to protect the image sensor.
4. Do not aim the camera directly into the sun or at other intense light sources that could

affect the image quality (it is not the problem for the IP camera), also shorten the service life for the image sensor.

5. Keep away from laser when it is working, otherwise the image sensor can be damage.
6. If the equipment is not working properly, please contact the store or the service center, do not disassemble or modify the equipment in any way. (Problems caused by unauthorized modification or repair should be at your own risk.）

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# 1 Overview

## 1.1 Product Summary

The IP camera combines a high quality digital video camera, with a powerful web server, to bring clear video to your desktop from anywhere on your local network or over the Internet.

The IPCAM is based on the TCP/IP standard. There is a WEB server inside which could support Internet Explore and other browsers. Therefore the management and maintenance of your device is simplified by using the network to achieve the remote configuration, start-up and to upgrade the firmware. Controlling the IPCAM and managing images is simplified by using the provided web interface across the network utilizing wireless connectivity.

It can be widely used in stores, factories, schools, offices or homes and other places.

At the same time provide PC client and Mobile phone Apps; you can view your world anytime and anywhere!

## 1.2 Product Feature

- H.264 Main Profile and Baseline profile compression algorithm，Image clearer, stream smaller, suitable for local, the Internet and cross-platform access;
- Resolution support 1280*720/640*352/320*176;
- Support two-way intercom function, support G.711 and G.726 audio encoding;
- Support 802.11b/g/n protocol, build-in WIFI module to perform wireless monitoring;
- Support four regional motion detection and external alarm detector, achieve all-round protection on the spot;
- Support level 3 user permissions Settings;
- Support max. 32G micro SD card for storing the alarm video and pictures;
- Built-in web server, use one port to send all the data, it facilitates network setting ;
- Support ONVIF and RTSP protocol, facilitate integration to the NVR;

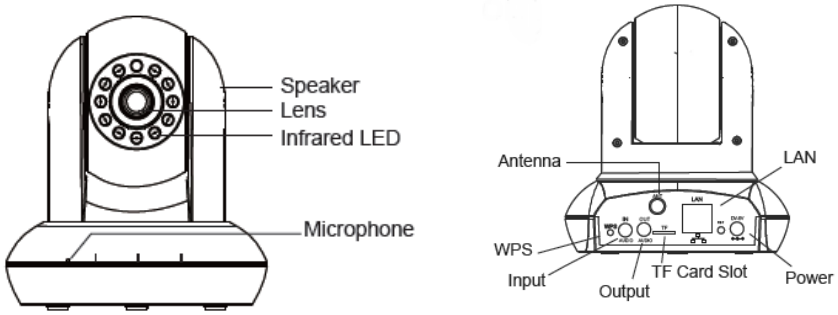
- Support P2P;
- Support WPS/QSS;
- Provide free client software, support Multi-view, Long time recording, video replay etc.;
- Provide free software viewed by mobile phone.

# 2 Access the IP Camera

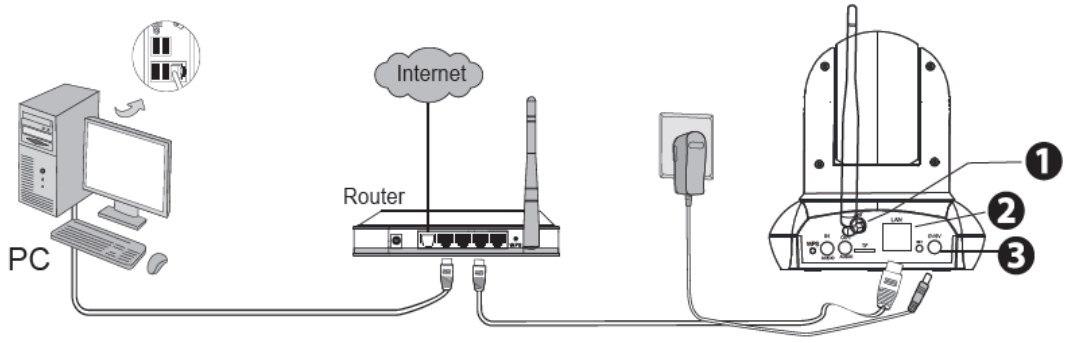
## 2.1 Access the Camera in LAN

### 2.1.1 Hardware Connection

1. Physical Description




2. Hardware Connection




1) Mount the Antenna and make it stand vertically (As for some cameras with fixed antenna, please ignore it).

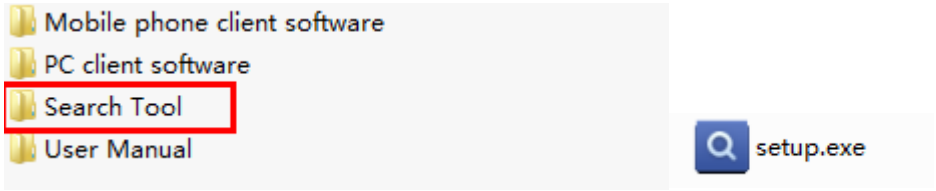
2) Connect the camera to the LAN network (Router or Switch) via network cable. Meanwhile, connect computer to the same router, as shown in the picture.

3) Connect the power adapter to the camera (please check carefully the voltage of power adaptor, don't insert incorrect power, otherwise it will damage the

device).

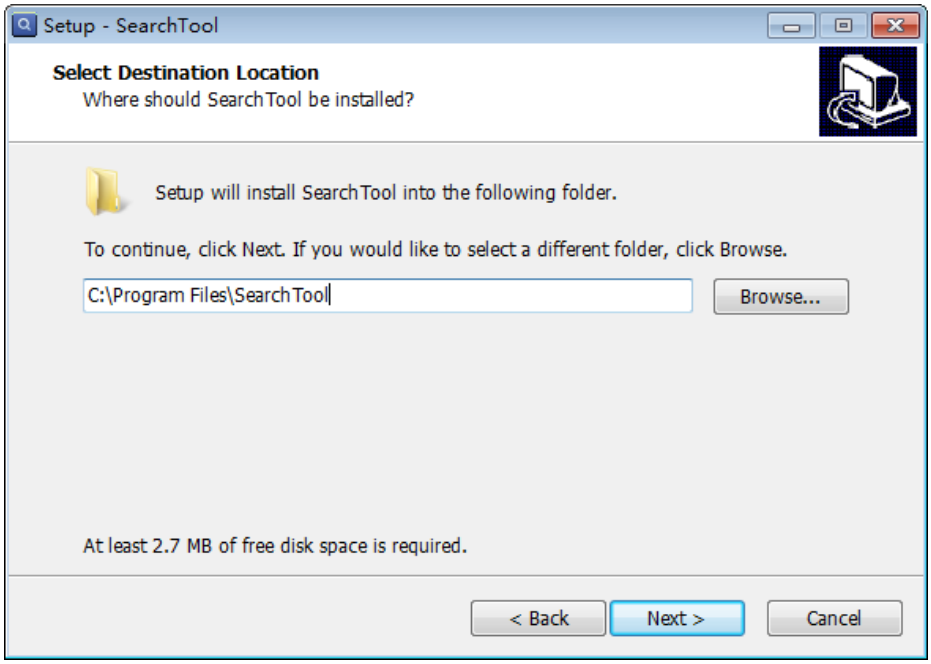
### 2.1.2 Software Connection

1. Insert CD to computer driver; and found “Search Tool”, and then click “setup.exe”

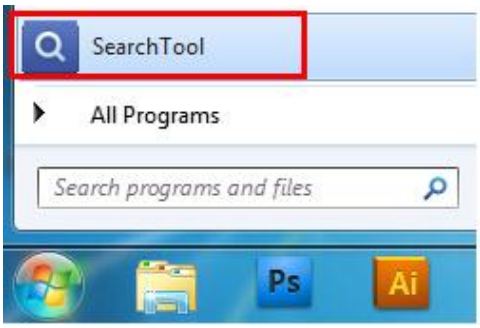



2. It will pop up a window as below; please choose the language you need, click “OK”

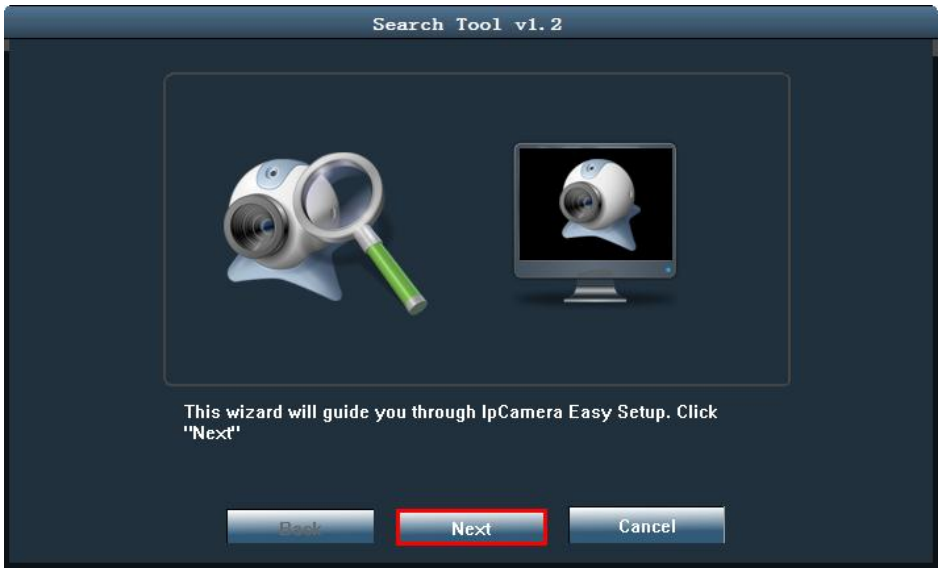
3. Click next. If you would like to select a different folder, click browser

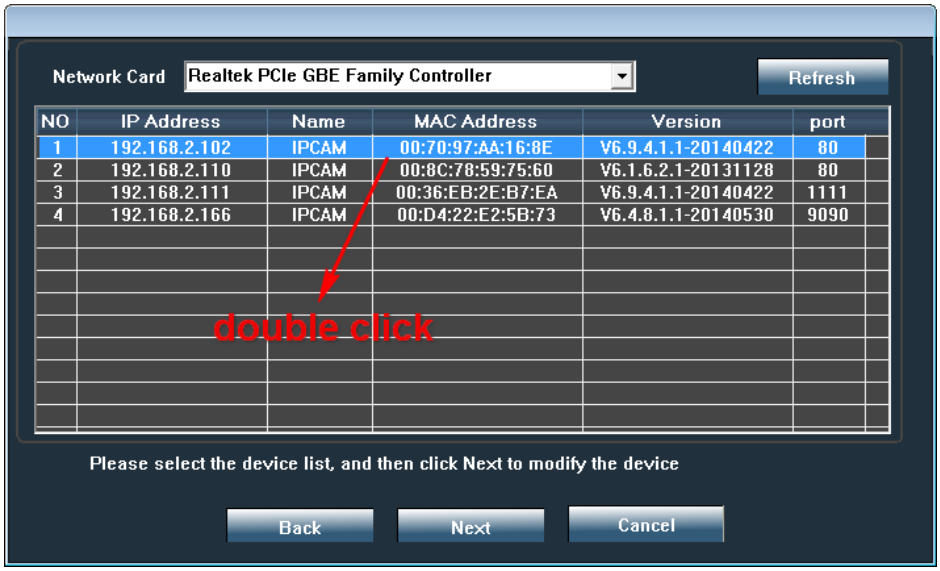

Setup - SearchTool
Select Destination Location
Where should SearchTool be installed?
Setup will install SearchTool into the following folder.
To continue, click Next. If you would like to select a different folder, click Browse.
C:\Program Files\SearchTool
Browse...
At least 2.7 MB of free disk space is required.
< Back
Next >
Cancel

4. Continually click “Next” until the following icon showed on “Start Menu” of your

computer. 


5. Double click the search tool software, after opened, click “Next”




**Note**: The software automatically searches IP Camera within the LAN.

It will display the IP address, name, MAC Address, Version, and Port.

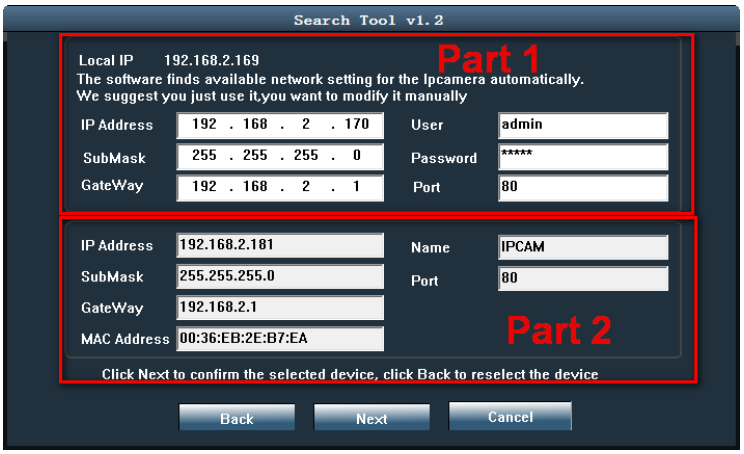
6. There are three kinds of situation

1) Search to the device in the local area network (LAN). All devices will be listed as shown above, please double click IP address to enter login interface. .

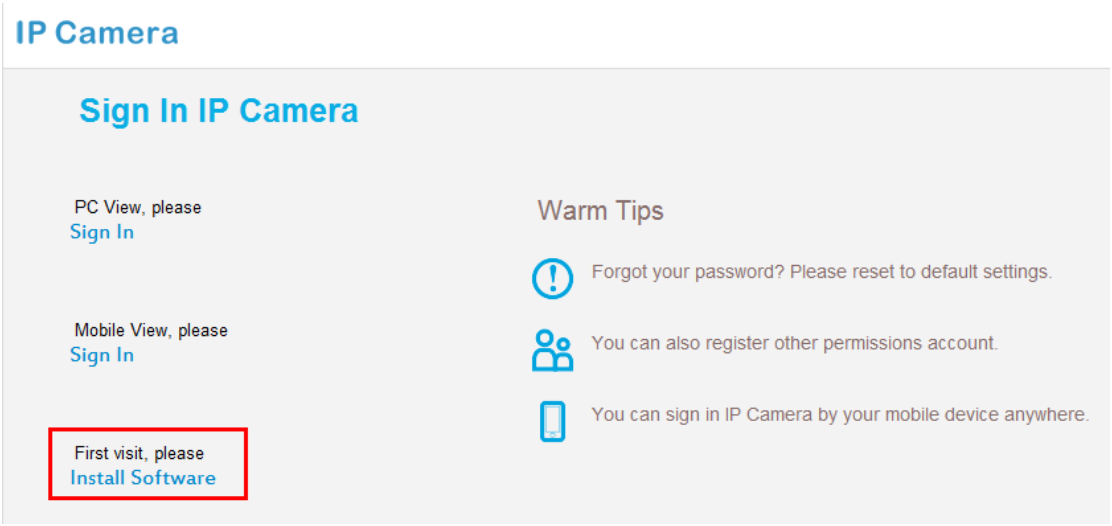
2) Found no device in the LAN. Pls click Refresh

3) Double click IP address, without any change; maybe the router didn't assign IP address to IP camera correctly. Please choose the IP address of camera, then click "Next". You can got following frame, then revise IP address, Submask, Gateway manually.

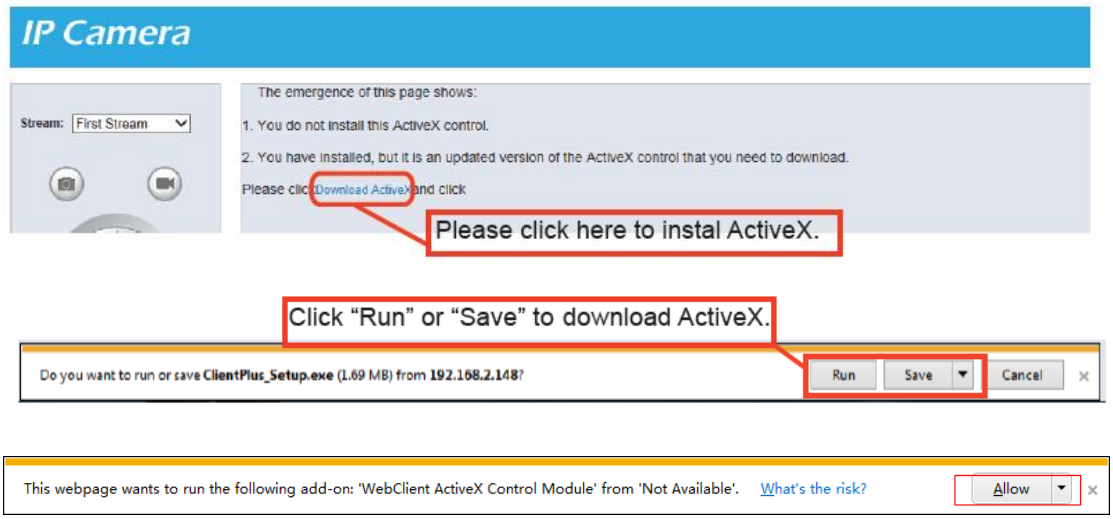
**Note**: Part 2 is the current IP address, only part 1's information can be revised.


Search Tool v1.2
Local IP 192.168.2.169
Part 1
The software finds available network setting for the Ipcamera automatically.
We suggest you just use it,you want to modify it manually
IP Address 192 . 168 . 2 . 170
SubMask 255 . 255 . 255 . 0
GateWay 192 . 168 . 2 . 1
User admin
Password *****
Port 80
IP Address 192.168.2.181
SubMask 255.255.255.0
GateWay 192.168.2.1
MAC Address 00:36:EB:2E:B7:EA
Name IPCAM
Port 80
Part 2
Click Next to confirm the selected device, click Back to reselect the device
Back
Next
Cancel

7. Double click the camera's IP address, your default browser will pop up a dialog, please enter default user name: admin and password: admin.

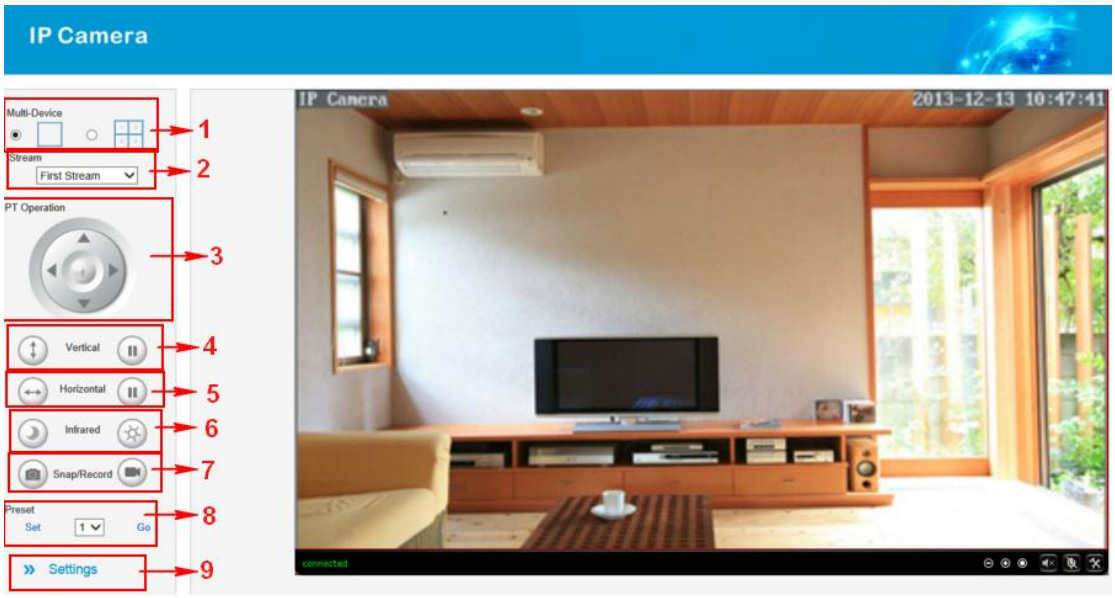

IP Camera
Sign In IP Camera
PC View, please
Sign In
Mobile View, please
Sign In
First visit, please
Install Software
Warm Tips
Forgot your password? Please reset to default settings.
You can also register other permissions account.
You can sign in IP Camera by your mobile device anywhere.

**Note:** The first time you login the camera need to install the plugin, according to the steps below click download and install. If without install Active X, you cannot view video like following picture.

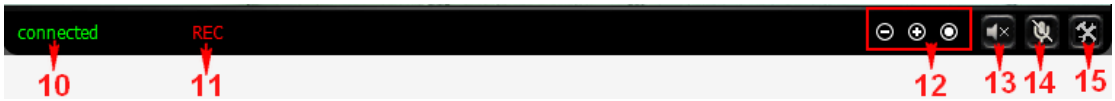

IP Camera
Stream: First Stream
The emergence of this page shows:
1. You do not install this ActiveX control.
2. You have installed, but it is an updated version of the ActiveX control that you need to download.
Please click Download ActiveX and click
Please click here to instal ActiveX.
Click "Run" or "Save" to download ActiveX.
Do you want to run or save ClientPlus_Setup.exe (1.69 MB) from 192.168.2.148?
Run
Save
Cancel


This webpage wants to run the following add-on: 'WebClient ActiveX Control Module' from 'Not Available'.
What's the risk?
Allow

2.1.3 View Video




1) Status bar




1. Multi-Device (Up to 4 cameras can be monitored at same time)
2. You can choose 1st stream or 2nd stream, 3rd Stream to view the video. 1st stream has the best solution. 3rd stream's resolution is 320x176 pixels.
3. PT control

   If the camera supports PT function, you can click up, down, left, right arrow to control the camera moving.
4. means start vertical, means stop
5. means start Horizontal, means stop
6. means turn on infrared Led light. means turn off infrared Led light
7. Snap/Record

   Click "Snap" button, to save the picture to the specified file.

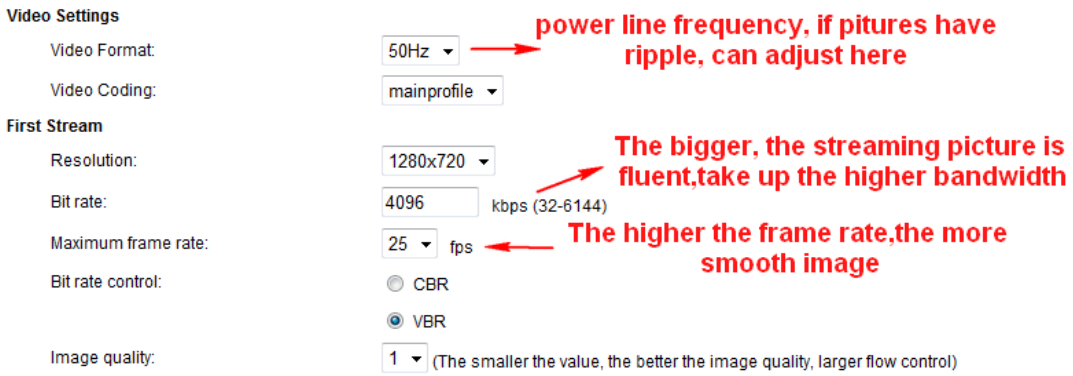
   Click "Record" button to start record. Click again to stop record.
8. Preset, when you set camera to a position, and then click "Set"，after the camera was changed the direction, click "Go" can move the camera to the position you have set.
9. Click Settings, enter to the management interface.

10. Connection status
11. Display record status: if click “Record”, it will show “REC” which stands for recording; click record button again, it will stop.
12. means zoom in, means zoom out. means return to normal situation.
13. Audio play button: it can play out the sound which collected by the equipment on the computer, click it again, it will stop playing.
14. Talk button: it can transmit the sound which collected by the computer to the equipment, and played out by the speaker which was connected to the equipment. Click it again, it will stop playing.
15. Set the file saving location: you may set the location for recording and captured picture.

# 3 Advanced Settings

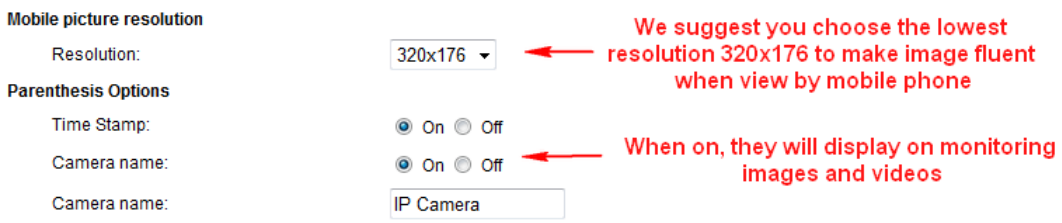
## 3.1 Video Settings

### 3.1.1 Video Settings




CBR: constant bit rate, video encoder will work according to the fixed settings.

VBR: Variable Bit Rate, video encoder will work variable to make image fluent, only refer to fixed settings.



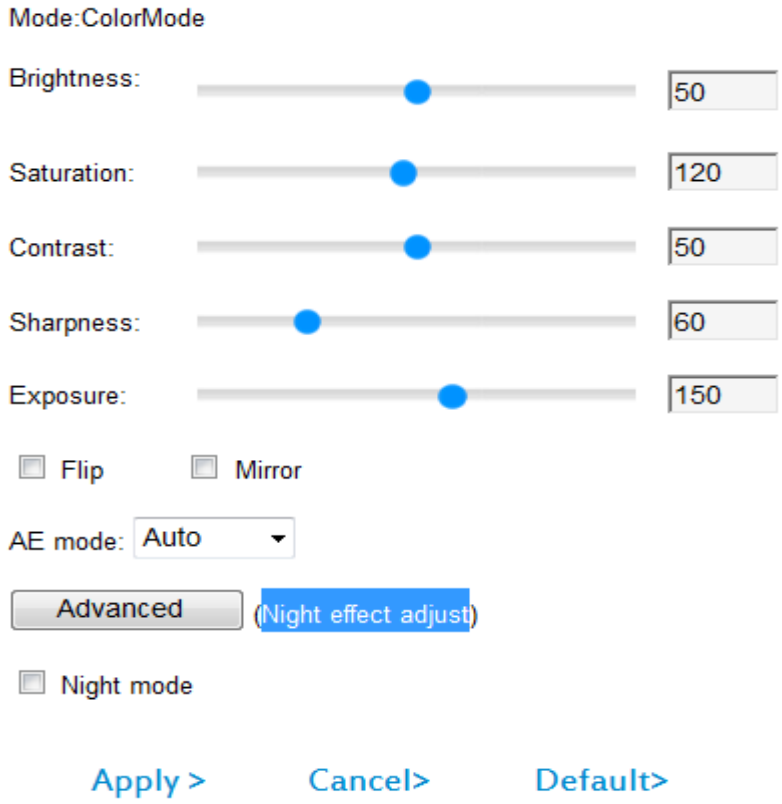
Video format: If video has ripple, you can adjust to eliminate ripple here.

Video coding: Main profile or baseline; default main profile.

Bit rate: The image more smooth, but the higher the bandwidth.

Parenthesis options: information will be displayed on the monitor screen after opening.

### 3.1.2 Image Settings



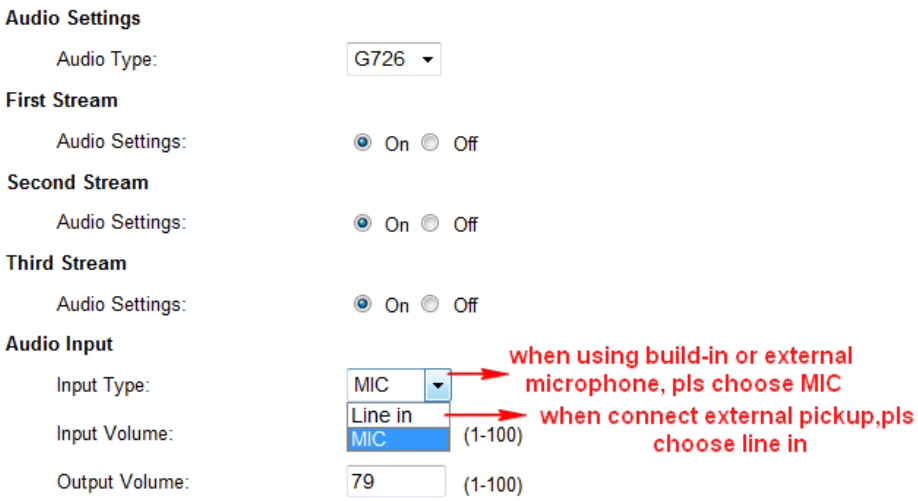

Color adjustment: drag the slider above, user can adjust the brightness, Saturation, Contrast, Sharpness and Exposure to meet their visual user preferences.

Flip and mirror: set the picture upside down, left and right sides.

AE mode: automatically, indoor and outdoor exposure.

Restore the default value: click on the "default" button after restore image parameter values to the factory settings.

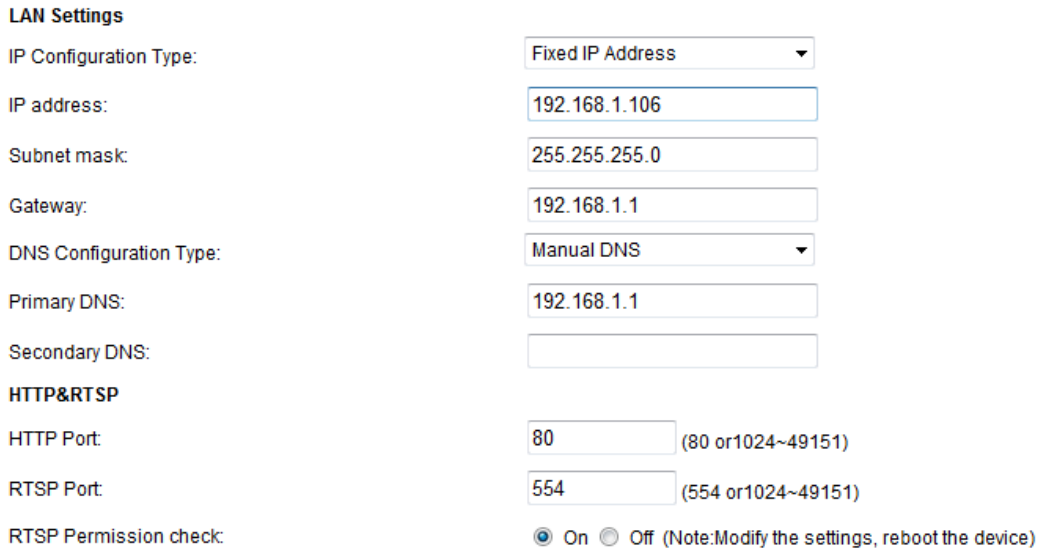
### 3.1.3 Audio Settings




Audio formats: currently support G.711 and G.726 two audio coding format, the effect is good, but a larger bandwidth. If you choose to open the audio, then in the corresponding code stream will transmit audio information.

## 3.2 Network Settings

### 3.2.1 Basic Network Settings




1) HTTP port: IP address identifies the network device, the device can run multiple web applications, each network program and using network port to transmit data, so data transmission is also can be said to be carried out between the port and port. When do port mapping, need to be consistent with the port (default port is 80).The default port is often occupied by other programs, it is recommended that

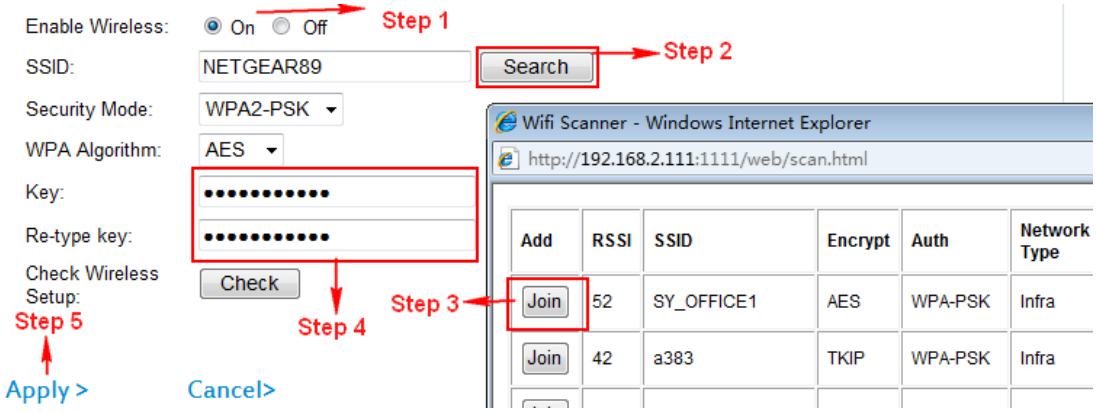
the reset the port number. Port number range of 80 or 1024-49151.

2) RTSP port: network camera support RTSP protocol, you can use the VLC to play.

3) RTSP permissions check: select open need to enter the camera when using RTSP connection login user name and password.

### 3.2.2 WIFI Settings (Two connection ways)

1. Connected by browsers




Step 1, Enable wireless

Step 2, Click “Search”

Step 3, Choose and Join your router at pop up new window

Step 4, Fill in user name and password of your router

Step 5, Click Apply

2. Connected via WPS

Please make sure your wireless router has WPS/QSS.

Press WPS/QSS button of the router two seconds and check if WPS signal light blinking.

Press the WPS button of camera 5 ~ 10 seconds, the camera will start WPS/QSS function, and connect your router within 60 seconds automatically.

**Note**: WPS light long time bright means the camera is connecting router.

WPS light blinking quickly means the camera connected router failed

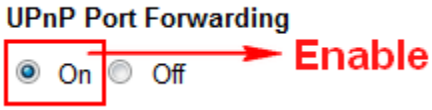
WPS light blinking slowly means the camera connected router successful.

Matching over 60 seconds means not successful, Please try above procedure again. If still failed, please try to connect Wi-Fi by browser or mobile phone. .

### 3.2.3 Remote Access Settings

1. Two ways of Port Forwarding

   1) Automatic Port forwarding

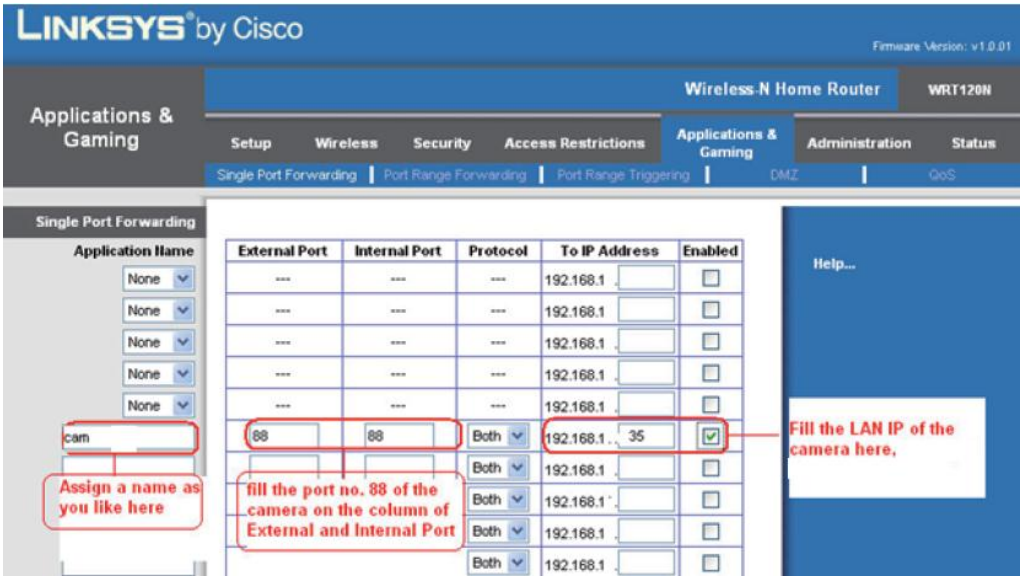


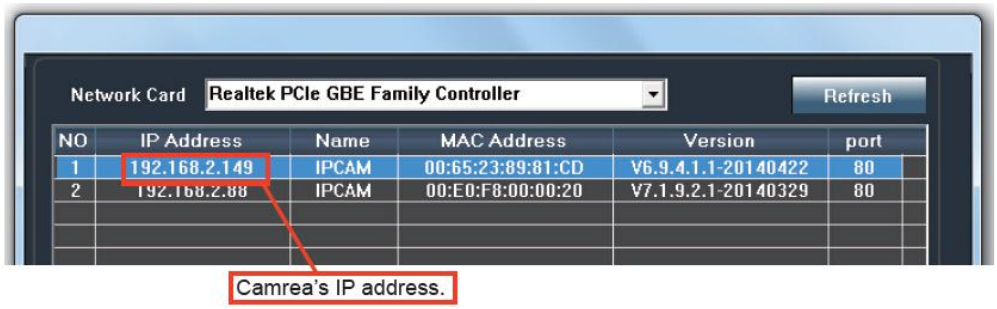

   2) If automatic UPnP port forwarding failed, please do manually set the router.

   A. Login the router and goes to the menu of Port Forwarding or Port Trigger (or named Virtue).

   B. Take Linksys brand router as an example, Login the router, and goes to Applications & Gaming->Single Port Forwarding.

   C. Create a new column by LAN IP address & HTTP Port No. of the camera within the router showed as below



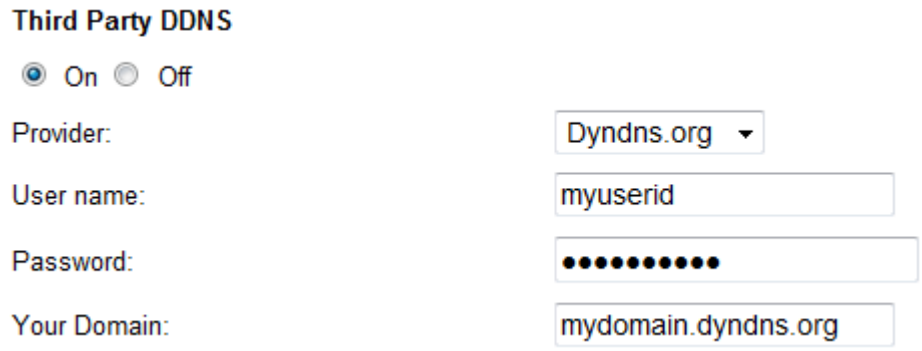




2. Two ways of DDNS setting

   1) After doing port forwarding successful, you can also visit camera by DDNS.

The manufacturer has established a DDNS system, and allotted a DDNS to every device, the user can view it from remote PC.

2) User can also use third party DDNS, such as www.dyndns.com.User must apply a free domain name from this website and fill the info into the below blanks and save the settings. Then the domain name can be used.

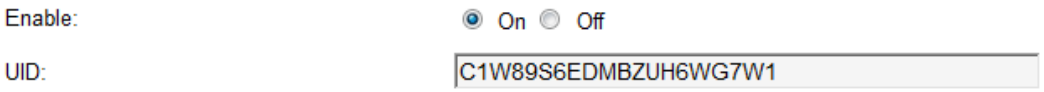



Using domain name to access the camera via internet, you can use the domain name+ http port to access the camera via internet. Take manufacturer's DDNS a0001.ipcddns.com and http port 88 as an example, The correct accessing link would be http:// a0001.ipcddns.com:88

### 3.2.4 ONVIF

IP Camera supports ONVIF can achieve compatibility with other manufacturers ONVIF products.

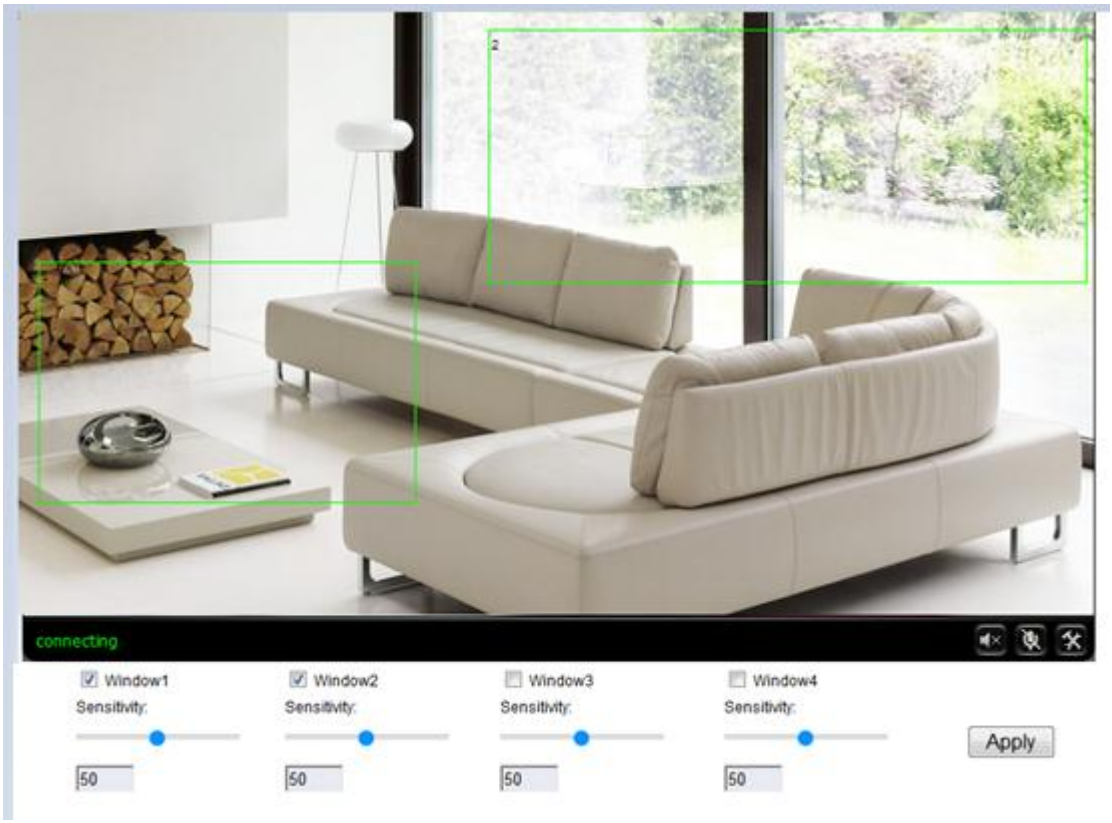
### 3.2.5 P2P




P2P platform available parameters (Note: UID of each camera is unique, cannot be repeated).

## 3.3 Alarm Settings

### 3.3.1 Motion Detection

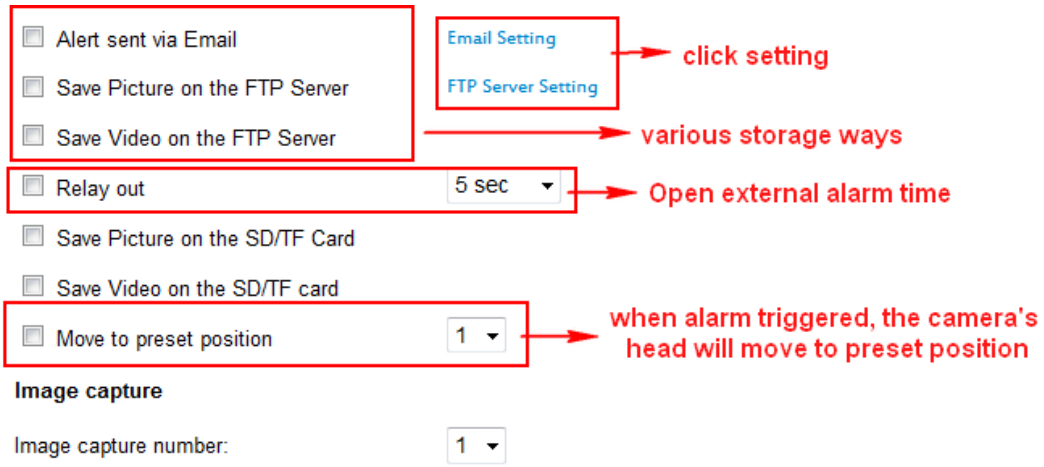



Please click “apply” after settings are done, and motion detection takes effect.

The camera will trigger corresponding alarm when the detection area occur any change.

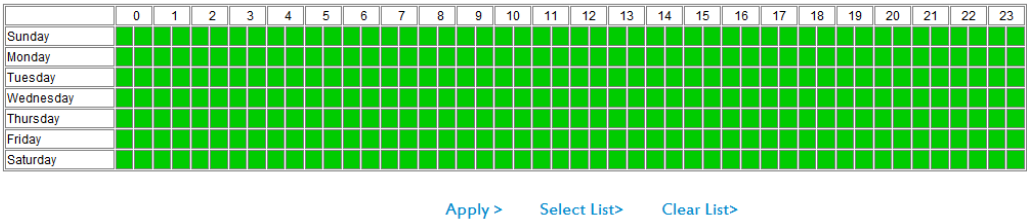
### 3.3.2 Alarm Mode Settings

After camera triggers the alarm, it will store the capture pictures and videos according to your setting ways, for example, store in SD/TF, or upload to FTP, or email you, etc.




**Note**: Please insert the SD/TF Card and tick the “Save Video on the SD card”, “Save video on the FTP server” will take effect.

### 3.3.3 Alarm Time Settings

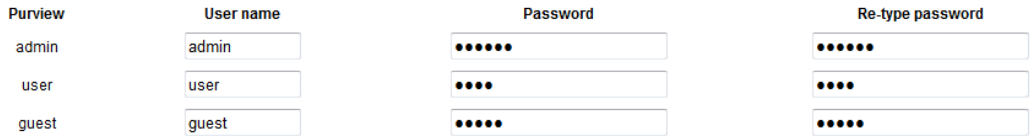



The device will trigger the alarm only during the scheduled time period, you can select the scheduled time according to your request.

**Note:** Please make sure your system time is correct before you set the alarm time period. Please refer to chapter 3.5.1 to set system time.

## 3.4 Advanced Settings

### 3.4.1 User Management




There are 3 levels of user authorization

1. Admin: “administrator” has the highest authority. It can do any settings. Factory default password: admin

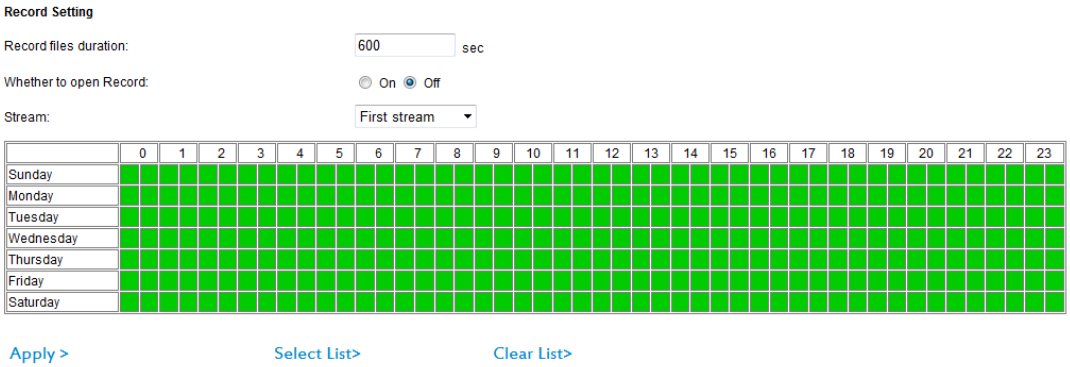
2. User: user can only operate the device but can't do any setting changes. The default password is user.
3. Guest: User can view the video, but can't operate the device. The default password is guest.

**Note:** Please change these 3 level passwords when your first use to ensure your safety.

### 3.4.2 Auto Snapshot

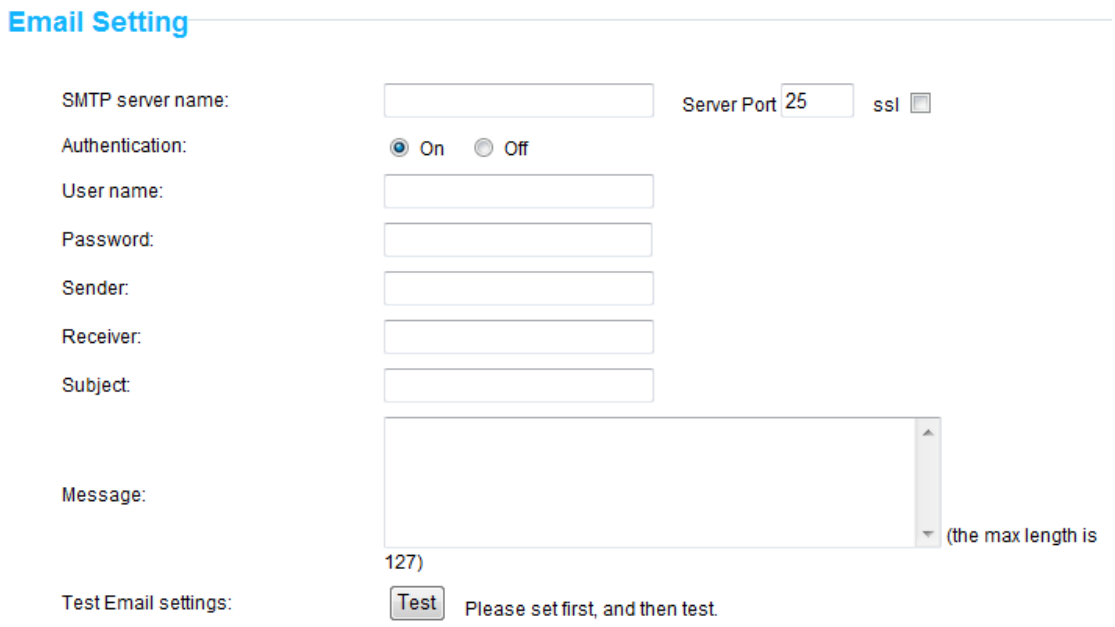
**Note:** Tick "Save Picture on the SD card", the snap pictures will be stored into SD card during the setting time.

### 3.4.3 Timing Record




**Note:** Please insert the TF / SD card under powered off state to set timing record.

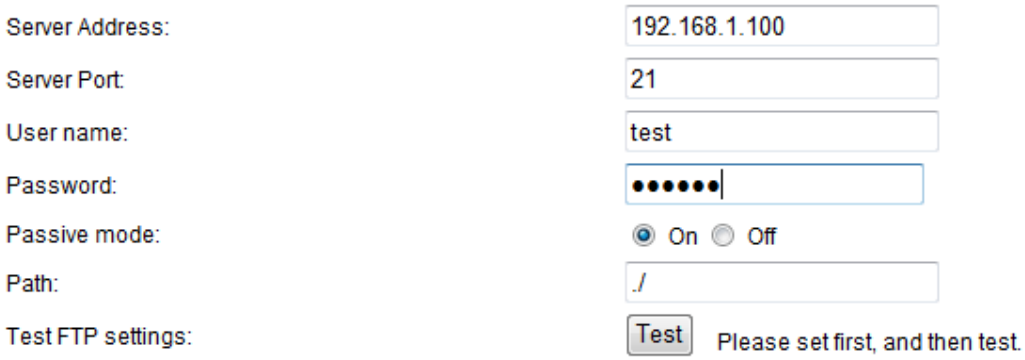
### 3.4.4 Email




The blanks must be filled completely and correctly. Any small mistakes will result in setting failed.

**Note:** The password cannot use special character; otherwise the camera cannot identify it.

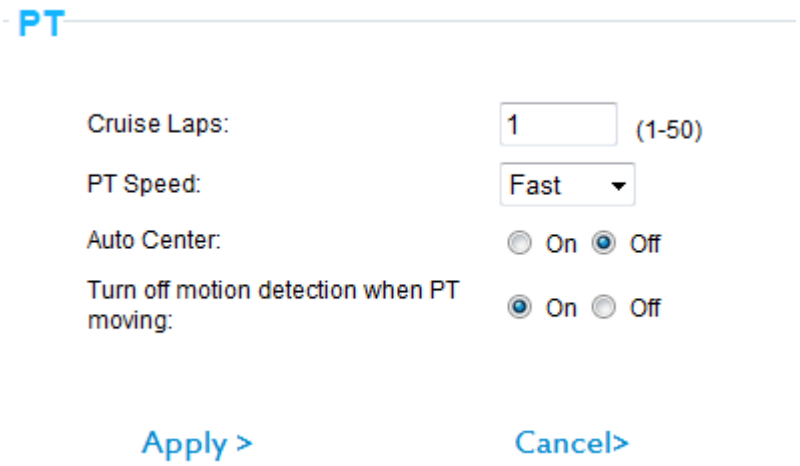
### 3.4.5 FTP




Please fill in FTP's user name and password correctly, also reserve some storage spaces for the video and keep FTP's authority of write and creation open.

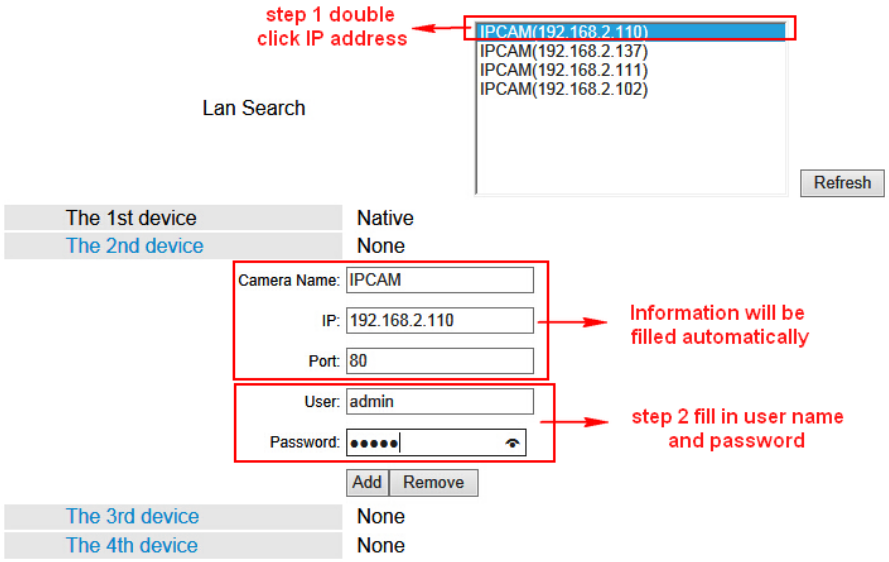
**Note:** The password cannot use special character; otherwise the camera cannot identify it.

### 3.4.6 PT




Cruise Laps: Control the laps of “Vertical” and “Horizontal”.
Auto Center: Set direction of the cameras’ head when start

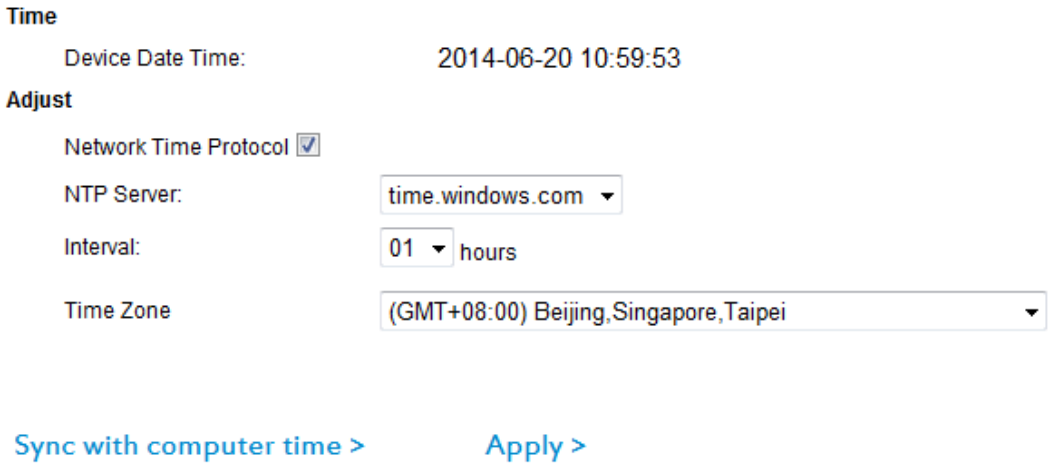
### 3.4.7 Multiple Devices




You view multiple devices at same time after adding.

## 3.5 System

### 3.5.1 Time




Please select the time zone first.

There are three options to set the time and date, including manual setting, sync with computer time, from network time server.

### 3.5.2 Initialize

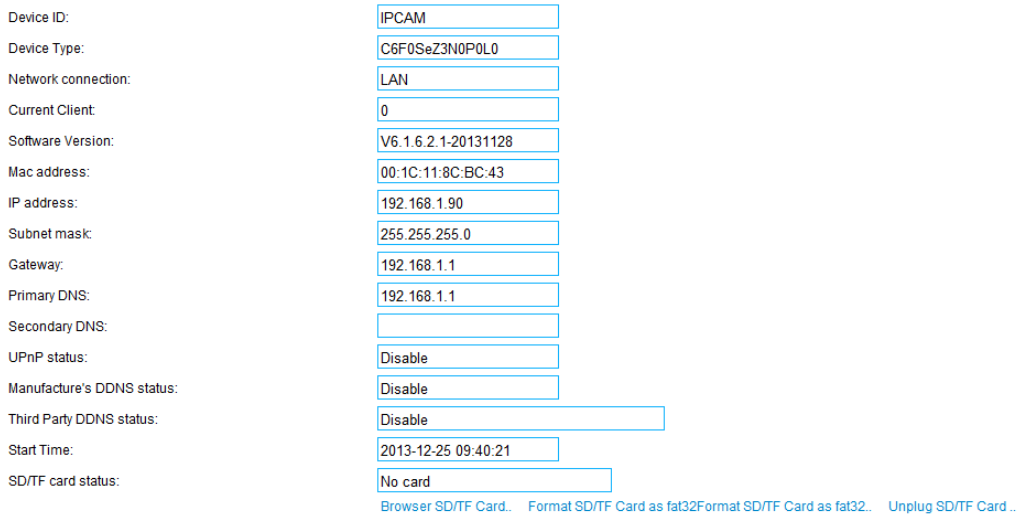
Choose “Backup setting data”, the camera will generate a file, user can save the setting on your computer. This feature is convenient for user to find the original settings of camera, do not need to set parameters again;

“Upgrade firmware” is to upgrade firmware and web camera system to get the newest software of camera.

### 3.5.3 System Log

Record all visitors’ login and logout time & date.

### 3.6 Device information




"Network Connection" will display "LAN" when connected by wired cable or display "Wireless LAN" when connected by WIFI.

"SD/TF status" will display if SD /TF card inserted and the rest capacity.

Note: The device supports max 32G micro-SD card. Please format the micro-SD card to FAT32 before using the card on camera, also please check if micro-SD Card matches the camera or not before purchasing.

# 4 Appendix

## 4.1 FAQ

**I have forgoten the administrator username and/or password**

To reset the administrator username and password, press and hold down the RESET BUTTON more than 10 seconds. Upon releasing the reset button, the username and password will return to the factory default administrator username and password. Please power on the camera before reset.

Default administrator username and password: admin

**No video image display in the IE browser**

When first using the browser (Internet Explore) access IP Camera, you must

install the plug-in.

Installation method: access IP Camera address, click on the "download controls", select "run" or "save" to download. After installation is complete, Refresh web, video image will be displayed.

**Unable to access IP Camera through IE browser**

Reason 1: Network problems

Solution: Connect your PC to the network is able to work properly test the network access, cable failure and network failures, until you can Ping through each other with a PC.

Reason 2: IP address is occupied by other equipment

Solution: Disconnect IP Camera with network connectivity, separate the IP Camera and PC are connected, re-set the IP address

Reason 3: IP addresses are located in different subnet

Solution: Check the server settings, IP address, subnet mask and gateway

**IP camera has been connected to the Internet but cannot access.**

Following reasons

1 for the first time to visit, please allow IE to load ActiveX.

2 IP camera Http port was blocked by the firewall or antivirus software. In this case, please change the port number of the equipment.

3 Confirm the network dynamic domain name, IP or port mapping have been set correctly.

## 4.2 Common IP camera network ports occupied

| | | |
|---|---|---|
| TCP | 80 | Http Port |
| | | Communication ports, audio and video data transmission |
| UDP | 554 | RTSP Port |
| ONVIF | 8080 | ONVIF Port |

**Disclaimer:**

This manual describes the content that you may now use the version with a difference, have encountered insurmountable problems if you are using this manual, please contact our technical support or product suppliers.

The manual will be updated from time to time; the company has the right without prior notice.